=> d his ful

(FILE 'HOME' ENTERED AT 11:41:08 ON 15 MAR 2005)

FILE 'HCAPLUS' ENTERED AT 11:44:42 ON 15 MAR 2005

E PRENDERGAST PATRICK/AU

- 13 SEA ABB=ON ("PRENDERGAST P"/AU OR "PRENDERGAST P J"/AU OR L1"PRENDERGAST PATRICK"/AU OR "PRENDERGAST PATRICK J"/AU)
- L2
- 0 SEA ABB=ON L1 AND CHEMOTHERAP? 0 SEA ABB=ON L1 AND ?COMB?(W)?THERAPY? L3

D TI L1 1-13

- 0 SEA ABB=ON L1 AND ?NEOPLAS? 0 SEA ABB=ON L1 AND ?CIRCILIOL? T.4
- L5

FILE 'REGISTRY' ENTERED AT 11:47:47 ON 15 MAR 2005

E CIRCILIOL/CN

L6 O SEA ABB=ON WPID

FILE 'WPIDS' ENTERED AT 11:50:33 ON 15 MAR 2005

E PRENDERGAST PATRICK/AU

- 30 SEA ABB=ON ("PRENDERGAST P"/AU OR "PRENDERGAST P T"/AU) 6 SEA ABB=ON L7 AND ?CHEMOTHERAP? L7
- L8

FILE 'HCAPLUS' ENTERED AT 12:00:19 ON 15 MAR 2005

L9 1 SEA ABB=ON ?CIRCILIOL?

SELECT RN L9 1-1

FILE 'REGISTRY' ENTERED AT 12:00:51 ON 15 MAR 2005

- L10 9 SEA ABB=ON (105226-41-3/BI OR 151345-08-3/BI OR 155862-53-6/BI OR 34334-69-5/BI OR 480-41-1/BI OR 520-12-7/BI OR 520-36-5/BI OR 638-95-9/BI OR 77-52-1/BI)
- FILE 'HCAPLUS' ENTERED AT 12:01:07 ON 15 MAR 2005 L11 1 SEA ABB=ON L9 AND L10
 - FILE 'REGISTRY' ENTERED AT 12:04:24 ON 15 MAR 2005 E GEMCITABINE/CN
- 1 SEA ABB=ON GEMCITABINE/CN L12
- L13 1 SEA ABB=ON 34334-69-5/RN

E 2,3,4-TRIMETHOXY ACETOPHENONE/CN E ACETOPHENONE 2,3,4-TRIMETHOXY/CN

- L14 1 SEA ABB=ON "ACETOPHENONE 4-METHYLPHENYLHYDRAZONE"/CN E ACETOPHENONE/CN
- 1 SEA ABB=ON ACETOPHENONE/CN L15 E FLAVONE/CN
- T-16 1 SEA ABB=ON FLAVONE/CN

FILE 'HCAPLUS' ENTERED AT 12:20:05 ON 15 MAR 2005

1944 SEA ABB=ON L12

L17

- L18 109134 SEA ABB=ON ?ACETOPHENON? OR ?FLAVON? OR ?METHOXYDIBENZOYL? OR ?CIRCILIOL?
- L195450 SEA ABB=ON L18 AND (?CHEMOTHERAP? OR ?NEOPLAS? OR ?ANTI?(W)(?C ANCER? OR ?PARASIT? OR ?VIRAL? OR ?BACTER?) OR ?ANTIVIRAL? OR ?ANTIBACT? OR ?ANTIPARASIT? OR ?ANTICANCER? OR ?ANTIBIOTIC?)
- 6836 SEA ABB=ON L19 AND ?RADIATION? OR ?PANCREATIC?(W)(?CANCER? OR L20 ?NEOPLASM? OR ?CARCIN? OR ?TUMOR? OR ?TUMOUR?)
- L21 126 SEA ABB=ON L19 AND (?RADIATION? OR ?PANCREATIC? (W) (?CANCER? OR ?NEOPLASM? OR ?CARCIN? OR ?TUMOR? OR ?TUMOUR?))
- L22 0 SEA ABB=ON L21 AND (?PHARM? OR ?DRUG?) (W) ?FORMUL?

```
62 SEA ABB=ON L21 AND (?PHARM? OR ?DRUG?)
2 SEA ABB=ON L23 AND ?MIMIC?
3 SEA ABB=ON L9 OR L24
L23
L24
L25
                DELETE SELECT
                 SELECT RN L25 1-3
     FILE 'REGISTRY' ENTERED AT 12:34:06 ON 15 MAR 2005
L26
             87 SEA ABB=ON (104227-87-4/BI OR 106941-25-7/BI OR 113852-37-2/BI etc.
     FILE 'HCAPLUS' ENTERED AT 12:34:20 ON 15 MAR 2005
L27
              3 SEA ABB=ON L25 AND L26
     FILE 'REGISTRY' ENTERED AT 13:35:09 ON 15 MAR 2005
L28
               STR
              4 SEA SSS SAM L28
L29
             78 SEA SSS FUL L28
L30
L31
                STR L28
L32
                STR
L33
              1 SEA SSS SAM L32
L34
             16 SEA SSS FUL L32
L35
                STR L32
L36
                STR L35
L37
              0 SEA SSS SAM L36
L38
              0 SEA SSS FUL L36
L39
                STR L36
L40
              0 SEA ABB=ON 153-866-57-0/RN
L41
              0 SEA ABB=ON 153-866-57/RN
             94 SEA ABB=ON L30 OR L34
     FILE 'HCAPLUS' ENTERED AT 13:44:45 ON 15 MAR 2005
L43
            330 SEA ABB=ON L42
L44
             25 SEA ABB=ON L43 AND (?CHEMOTHERAP? OR ?NEOPLAS? OR ?ANTICANCER?
                 OR ?ANTIVIRAL? OR ?ANTIBACT? OR ?ANTIPARASIT? OR ?ANTIBIOTIC?)
              0 SEA ABB=ON L43 AND (?ANTIMETABOLIT? OR ?NUCLEOTIDE?(W)?ANALOG?
L45
                 OR ?NUCLEOSIDE? (W) ?ANALOG?)
              3 SEA ABB=ON L43 AND (?METABOLIT? OR ?NUCLEOTIDE?(W)?ANALOG? OR
L46
                ?NUCLEOSIDE? (W) ?ANALOG?)
              0 SEA ABB=ON L43 AND ?PANCREA?
L47
     FILE 'REGISTRY' ENTERED AT 13:48:02 ON 15 MAR 2005
T<sub>1</sub>48
             1 SEA ABB=ON 34334-69-5/RN
T.49
             95 SEA ABB=ON L42 OR L48
     FILE 'HCAPLUS' ENTERED AT 13:49:18 ON 15 MAR 2005
            483 SEA ABB=ON (L49 OR ?CIRCILIOL?)
L50
             33 SEA ABB=ON L50 AND (?CHEMOTHERAP? OR ?NEOPLAS? OR ?ANTICANCER?
L51
                 OR ?ANTIVIRAL? OR ?ANTIBACT? OR ?ANTIPARASIT? OR ?ANTIBIOTIC?)
L52
              0 SEA ABB=ON L50 AND (?ANTIMETABOLIT? OR ?NUCLEOTIDE?(W)?ANALOG?
                 OR ?NUCLEOSIDE? (W) ?ANALOG?)
       1 SEA ABB=ON L50 AND ?PANCREA?
L53
L54
             33 SEA ABB=ON L51 OR L53
L55
             1 SEA ABB=ON L54 AND (L12 OR ?GEMCITABINE?)
L56
             33 SEA ABB=ON L54 OR L55
L57
             2 SEA ABB=ON L56 AND ?RADIAT?
L58
            33 SEA ABB=ON L56 OR L57
L59
            13 SEA ABB=ON L58 AND (?PHARM? OR ?DRUG?)
L60
            33 SEA ABB=ON L58 OR L59
           24 SEA ABB=ON L60 AND (PRD<20010306 OR PD<20010306) 2 4 Cets from CAPlus
L61
```

Applicant Search

Kantamneni 10/091,855

15/03/2005

=> d ibib abs ind 18 4

L8 ANSWER 4 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER:

2003-046729 [04] WPIDS

DOC. NO. CPI:

C2003-011832

TITLE:

Composition, useful in the treatment of, e.g. neoplasia, viral or parasitic infection, comprises at least one compound selected from circiliol, acetophenone and flavone derivatives, and an additive, diluent, carrier or

excipient.

DERWENT CLASS:

A96 B05

INVENTOR(S):

PRENDERGAST, P T

PATENT ASSIGNEE(S):

(PREN-I) PRENDERGAST P T

COUNTRY COUNT:

100

PATENT INFORMATION:

PATENT	NO	KIND	DATE	WEEK	LA	PG
						-

WO 2002069949 A2 20020912 (200304)* EN 66

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

US 2002169140 A1 20021114 (200304) AU 2002238799 A1 20020919 (200433)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002069949	A2	WO 2002-IB632	20020305
US 2002169140	A 1	US 2002-91855	20020306
AU 2002238799	A1	AU 2002-238799	20020305

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002238799	'A1 Based on	WO 2002069949

PRIORITY APPLN. INFO: IE 2001-209 20010306

AN 2003-046729 [04] WPIDS AB WO 200269949 A UPAB: 20030117

NOVELTY - A composition (I) comprises:

- (A) at least one micronized compound (A) selected from circiliol, acetophenone and flavone derivatives; and
 - (B) an additive, diluent, carrier, excipient or their salts. DETAILED DESCRIPTION A composition (I) comprises:
- (A) at least one micronized compound (A) selected from circiliol, 6-hydroxy-2,3,4-trimethoxy acetophenone; 2-(3,4-dibenzyloxybenzoyloxy)-4,5,6-trimethoxy acetophenone, 3'4'-dibenzyloxy-2-hydroxy-4,5,6-trimethoxydibenzoyl methane, 6,7-dibenzyloxy-5,6,7-trimethoxy flavone, 3,4-dihydroxy-5,6,7-trimethoxy flavone, 3,4-diacetoxy-5,6,7-trimethoxy flavone, their derivatives, metabolites, analogs and/or mimic molecules; and
 - (B) an additive, diluent, carrier, excipient or their salts. INDEPENDENT CLAIMS are also included for:

- (1) Pharmaceutical formulation (II) comprising (I), at least one chemotherapeutic agent and a carrier for the agent; and
- (2) Methods of treating a patient suffering from neoplasia, viral infection or parasitic comprising the administration of (I).

ACTIVITY - Cytostatic; Anti-HIV; Protozoacide; Anti-tumor; Virucide; Immunomodulator; Antibacterial.

No biological data available.

MECHANISM OF ACTION - Neoplastic cell proliferation inhibitor; Tumor growth inhibitor.

The in vitro growth of circiliol (A) was tested in large cell lung cancer line LXFL 529L and lung adenocarcinoma cell line LXFA 526L in a modified propidium iodide assay as described in Dengler et al. (1995). (A) was dissolved in dimethylsulfoxide at a stock concentration of 100 mg/ml and stored at 4 deg. C. It was observed that both cell lines grew very well with initial cell number increasing 4-fold.

- (A) at concentration of 30 mu g/ml and 300 mu g/ml resulted in tumor growth inhibition of 39 56%.
- USE (I) is used in the manufacture of a medicament for treatment of a mammal (e.g. neonate) suffering from:
- (a) a neoplasia, e.g. precancerous lesion including syndromes represented by abnormal neoplastic and/or dysplastic, changes of tissue comprising precancerous growths in colonic, breast, renal, central nervous, gastric, or lung tissues, or conditions such as dysplastic nevus syndrome, precursor to malignant melanoma of the skin, dysplastic nevus syndromes, polyposis syndromes, colonic polyps, precancerous lesions of the cervix (i.e. cervical dysplasia), prostatic dysplasia, bronchial dysplasia, breast, bladder and/or skin and related conditions (e.g. actinic keratosis), prostate cancer, colon cancer, small cell lung cancer, large cell lung cancer, lung adenocarcinoma, epidermoid lung cancer, melanoma (including amelanotic subtypes), renal cell carcinoma, gastric carcinoma, cancers of the central nervous system including brain tumors, neuroblastomas, gastric carcinoma, breast cancer, ovarian cancer, testicular cancer, lymphoma and leukemia, oesophageal cancer, stomach cancer, liver cancers, prostate cancer, cervical cancer, adrenal cancer, oral or mucosal cancer, bladder cancer, pancreatic cancer, lymphoma, Hodgkin's disease, sarcomas, haematopoietic cell cancers such as B cell leukaemia/lymphomas, myelomas, T-cell leukemias/lymphomas, small cell leukemias/lymphomas, null cell, sezary, monocytic, myelomonocytic and hairy cell leukemias, a tumour including an epidermoid or myeloid tumour, acute or chronic, nonsmall cell, squamous or solid;
- (b) a viral infection condition by DNA viruses and RNA viruses (e.g. HIV, SHIV, SIV, FIV, HSV, CMV, HAV, HBV, HCV, HDV, HEV, EBV, BVDV, HSV-1, HSV-2, HSV-6, HHV-6, HHV-8, retrovirus infection, togavirus infection, flavivirus infection, rubivirus infection, pestivirus infection, lipid envelope virus infection, filovirus, picomavirus infection, rhinovirus infection, coronavirus infection, respiratory syncytial virus infection, poliovirus infection, parainfluenza virus infection, influenza virus infection, hantavirus, adeno-associated virus, measles virus, poxvirus, filovirus, human papilloma virus and animal papilloma virus infection), at least one complication or co-infection associated with AIDS, AIDS related syndromes, including cachexia and/or wasting syndrome; or
- (c) a parasite infection condition by Trypanosoma (e.g. Trypanosoma cruzi, Trypanosoma brucei, Trypanosoma gambiense or Trypanosoma rhodesiense), Plasmodium (e.g. Plasmodium falciparum, Plasmodium vivax, Plasmodium malariae, Plasmodium ovale, Plasmodium berghei), Entamoeba (e.g. Entamoeba histolytica), Balantidium (e.g. Balantidium coli), Leishmania (e.g. Leishmania brazilienis, Leishmania mexicana, Leishmania donovani or Leishmania tropica), Penumocystis (e.g. Penumocystis carinii), Trichomoniasis (e.g. Trichomoniasis vaginalis), or Toxoplasma (e.g. Toxoplasma gondii), to treat malaria, sleeping sickness, African

trypanosomiasis, Chagas disease, American trypanosomiasis, cryptosporidiosis, amebiasis, balantidiasis, giardiasis, leishmaniasis, pneumocystosis, trichomoniasis, toxoplasmosis; a bacterial infection (intracellular or extracellular) condition such as mycoplasma infection, Listeria infection, Mycobacterium infection, Streptococcus infection, Staphylococcus infection, Vibrio infection, Salmonella infection, shigella infection, enterotoxigenic, enteropathogenic, enteroinvasive or enterohemorrhagic E. coli infection, Yersinia infection, Campylobacter infection, Pseudomonas infection, Borrelia infection, Legionella infection, Haemophilus infection, pulmonary Aspergillosis, mucosal or oropharyngealcandidiasis or juvenile paracoccidiomyosis; or

For treatment of a subject for suppression of immune response

For treatment of a subject for suppression of immune response rejection in tissue transplantation (all claimed).

ADVANTAGE - (I) endows a **chemotherapeutic** agent with substantially enhanced therapeutic efficacy and reduced toxicity. Dwg.0/2

AN 2003-046729 [04] WPIDS

DC A96 B05

IC ICM A61K031-00

- ICS A61K009-127; A61K009-16; A61K009-32; A61K009-36; A61K031-12; A61K031-235; A61K031-353; A61K039-395; A61K039-42; A61K039-44; A61P031-00; A61P031-04; A61P031-12; A61P031-18; A61P033-00; A61P035-00; A61P037-06
- ICA A61K031-137; A61K031-155; A61K031-185; A61K031-191; A61K031-341; A61K031-352; A61K031-365; A61K031-407; A61K031-4164; A61K031-4375; A61K031-4706; A61K031-4709; A61K031-473; A61K031-505; A61K031-513; A61K031-52; A61K031-522; A61K031-541; A61K031-555; A61K031-65; A61K031-7048; A61K031-7056; A61K031-7064; A61K031-7068; A61K031-7072; A61K031-7076
- MC CPI: A12-V01; B02-A; B02-T; B04-A02; B04-B03A; B04-B03B; B05-A02; B05-B01C; B06-H; B07-H; B10-A09B; B10-A10; B10-A17; B10-B02J; B10-B03B; B10-E02; B10-G02; B12-M11F; B14-A01; B14-A02; B14-A02B1; B14-A03; B14-B02; B14-G02C; B14-G03; B14-H01; B14-H01A; B14-H01B; B14-J01A2; B14-J01A4
- DRN 0020-U; 0036-U; 0037-U; 0078-U; 0084-U; 0153-U; 0165-U; 0177-U; 0210-U; 0285-S; 0285-U; 0287-U; 0295-S; 0295-U; 0303-U; 0318-S; 0318-U; 0472-U; 0479-S; 0479-U; 1096-U; 1243-U; 1257-U; 1259-U; 1382-U
 PLE UPA 20030117
 - [1.1] 018; R00479 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D85 F41 F89; H0000; P0088; P0113
 - [1.2] 018; R00009 G2108 D01 D11 D10 D50 D60 D83 F27 F26 F36 F35; R00448 G2108 D01 D11 D10 D50 D60 D82 F27 F26 F36 F35; H0022 H0011; P1978-R P0839 D01 D50 D63 F41
 - [1.3] 018; R16917 G3645 G3634 G3623 D01 D03 D10 D11 D18 D19 D22 D23 D42 D50 D63 E19 F24 F34 F41 P0599 H0293
 - [1.4] 018; G3690 G3634 G3623 P0599 D01 D03 D11 D23 D42 D63 D76 F24 F34 H0293 E19 E00 D19 D18 D50 F26-R F41-R
 - [1.5] 018; R00657 G0395 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D88 F41 F89; H0000; P0088
 - [1.6] 018; R01606 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D88 F08 F07 F41 F89; H0000; P0088
 - [1.7] 018; ND01; Q9999 Q8037 Q7987

CMC UPB 20030117

M1 *83* M423 M431 M782 M905

- DCN: R16918-K; R16918-Q; R16918-M; RA0NLR-K; RA0NLR-Q; RA0NLR-M
 M1 *84* H7 H721 J0 J011 J2 J271 M210 M213 M214 M231 M232 M262 M272
 M281 M320 M423 M431 M782 M904 M905
 DCN: RA0OES-K; RA0OES-O; RA0OES-M
- M1 *85* H4 H401 H481 H8 J0 J011 J1 J171 M280 M311 M312 M321 M331 M340 M342 M349 M381 M391 M416 M423 M431 M620 M782 M904 M905

```
DCN: RAOB83-K; RAOB83-M
M1 *86* G011 G100 J0 J011 J012 J1 J131 J2 J221 M1 M123 M136 M210
        M211 M262 M280 M281 M320 M423 M431 M510 M520 M530 M531 M540 M782
        M904 M905
        DCN: R16917-K; R16917-M; RA0B9L-K; RA0B9L-M
    *89* M423 M431 M782 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452
M1
         P631 P632 P633
        DCN: RA1FGW-K; RA1FGW-T; RA1FGW-M
М1
    *90* D015 D019 D023 D025 E470 E499 E510 H1
                                              H100 H141 J0
         J322 J5
                  J523 L9 L941 L942 L999 M1 M125 M129 M136 M139 M210
        M211 M240 M283 M320 M423 M431 M513 M520 M530 M540 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        RIN: 11946
        DCN: RA169M-K; RA169M-T; RA169M-M
M2 *01* D013 D024 D120 G015 G100 H5
                                    H543 H8
                                              JO
                                                   J012 J2
                                                             J242 J5
                 M113 M210 M211 M262 M272 M282 M283 M320 M412 M431 M511
        J521 M1
        M520 M531 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434
        P446 P452 P631 P632 P633
        DCN: RA8RNF-K; RA8RNF-T; RA8RNF-M
M2 *02* D013 D024 D120 G015 G100 H4 H402 H442 H5 H543 H8
                                                           J5
                                                                J521
        M1 M113 M210 M211 M272 M283 M320 M412 M431 M511 M520 M531 M540
        M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631
        P632 P633
        DCN: RA8RNC-K; RA8RNC-T; RA8RNC-M
                                                             Ì5
   *03* D013 D024 D026 D029 D120 G010 G019 G100 H5 H561 H8
        K0 L6
                L660 L699 M1 M113 M210 M211 M272 M283 M311 M322 M342
        M373 M392 M412 M431 M511 M520 M533 M540 M782 M904 M905 P210 P220
        P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA8RLU-K; RA8RLU-T; RA8RLU-M
M2
   *04* G010 G019 G037 G038 G113 G561 H5 H563 H8 J0 J011 J2 J251
        J5
            J581 K0 L6 L660 M210 M211 M272 M283 M311 M323 M342 M349
        M373 M381 M391 M392 M414 M431 M510 M520 M533 M541 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RASRLT-K; RASRLT-T; RASRLT-M
M2 *05* G010 G015 G018 G019 G100 H4 H401 H441 H5 H543 H8
                                                           J5
                                                                  J582
        M392 M414 M431 M510 M520 M533 M540 M782 M904 M905 P210 P220 P310
        P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA8R4U-K; RA8R4U-T; RA8R4U-M
M2 *06* G018 G100 H4 H401 H441 H5 H543 H8
                                             J5
                                                   J581 M210 M211 M262
        M272 M281 M283 M320 M414 M431 M510 M520 M531 M540 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA8R4T-K; RA8R4T-T; RA8R4T-M
M2 *07* F012 F014 F542 H1 H100 H121 J5 J521 L9 L910 M280 M320 M413
        M431 M510 M521 M530 M540 M782 M904 M905 M910 P210 P220 P310 P330
        P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R00303-K; R00303-T; R00303-M
M2 *08* F011 F012 F013 F014 F015 F019 F113 F580 H1
                                                   H100 H121 H2 H211
        H4 H403 H422 H481 H8 J5 J521 K0 L8 L812 L821 L834 L9
        L910 L999 M280 M311 M321 M342 M373 M391 M413 M431 M510 M522 M530
        M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 -
        P631 P632 P633
        RIN: 00212
        DCN: R08216-K; R08216-T; R08216-M
M2 *09* F011 F012 F521 G010 G100 H1 H181 H2
                                             H201 H3
                                                      H321 J0
        J3 J371 L922 M280 M311 M322 M342 M349 M373 M381 M391 M413 M431
        M510 M521 M531 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
        DCN: RAODQR-K; RAODQR-T; RAODQR-M
M2 *10* B633 B712 B722 B741 B823 B831 B840 F012 F014 F016 F019 F240 F580
```

```
G013 G100 H1 H101 H102 H123 H4
                                          H401 H481 H8 L910 L999 M1
         M123 M143 M280 M311 M321 M342 M373 M391 M411 M431 M510 M522 M531
         M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452
         P631 P632 P633
         RIN: 00064 00212
         DCN: RA095K-K; RA095K-T; RA095K-M
M2 *11* G012 G015 G019 G022 G029 G113 G221 G299 J0
                                                    J014 J3
         K4
             K431 K499 L4 L432 M1 M121 M122 M129 M136 M137 M139 M210
         M211 M240 M282 M320 M414 M431 M510 M520 M533 M540 M782 M904 M905
         P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
         DCN: R04427-K; R04427-T; R04427-M
M2 *12* C316 F011 F012 F013 F014 F015 F018 F111 F740 H2 H211 H3
                  K441 K6 K630 M210 M211 M240 M281 M320 M413 M431 M510
         M522 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434
         P446 P452 P631 P632 P633
         RIN: 00245
         DCN: R18588-K; R18588-T; R18588-M
M2 *13* C316 F012 F013 F014 F015 F541 F620 G013 G017 G100 H1 H100 H101
         H122 H141 H543 K353 L910 L943 M1 M123 M132 M147 M210 M211 M240
         M272 M281 M283 M311 M320 M321 M342 M413 M431 M510 M521 M531 M540
         M650 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452
         P631 P632 P633
         DCN: RAOOLG-K; RAOOLG-T; RAOOLG-M
M2 *14* G020 G035 G037 G039 G060 G420 H1 H103 H161 H4 H403 H441 H462
                  J011 J3 J351 J5 J563 M210 M211 M240 M273 M281 M282
         M320 M414 M431 M510 M520 M531 M540 M782 M904 M905 M910 P210 P220
         P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
         DCN: R01382-K; R01382-T; R01382-M; R14207-K; R14207-T; R14207-M
   *15* D011 D019 D022 D621 D680 H4 H401 H481 H5 H541 H7 H715 H721
         H8 M1
                M126 M132 M210 M211 M212 M240 M272 M281 M311 M321 M343
         M373 M391 M412 M431 M512 M520 M530 M540 M782 M904 M905 M910 P210
         P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R01096-K; R01096-T; R01096-M; R10482-K; R10482-T; R10482-M
M2 *16* D013 D015 D030 D160 F012 F013 F014 F015 F016 F123 H1 H100 H121
        H4 H405 H424 H5 H521 H8 J0 J011 J1 J111 J5
        L942 M1 M126 M141 M210 M211 M240 M283 M320 M412 M431 M511 M521
        M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446
        P452 P631 P632 P633
        RIN: 45408
        DCN: R04792-K; R04792-T; R04792-M
M2 *17* A351 A940 A960 C108 C550 C710 C720 C801 C802 C803 C804 C805 C807
        H4 H405 H484 H8 J0 J011 J1 J171 K0 L8 L814 L821 L832
        M280 M315 M321 M332 M344 M349 M381 M391 M411 M431 M510 M520 M530
        M540 M620 M630 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434
        P446 P452 P631 P632 P633
        DCN: R18589-K; R18589-T; R18589-M
M2 *18* D011 D022 D029 E111 H1 H102 H103 H121 H181 H5 H541 H6 H602
        H641 H8 M210 M211 M212 M272 M273 M281 M282 M315 M321 M331 M342
        M383 M391 M412 M431 M511 M520 M530 M540 M782 M904 M905 M910 P210
        P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R00287-K; R00287-T; R00287-M
M2 *19* G020 G031 G035 G037 G038 G060 G420 H1 H103 H161 H4 H403 H441
        H462 H8 J0 J011 J3 J351 J5 J563 M210 M211 M240 M273 M281
        M282 M320 M414 M431 M510 M520 M531 M540 M782 M904 M905 M910 P210
        P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R00210-K; R00210-T; R00210-M; R04583-K; R04583-T; R04583-M
M2 *20* F011 F012 F015 F521 H1 H181 H2 H201 H3 H321 H4 H401 H481
        H8 M210 M211 M240 M281 M312 M321 M342 M383 M391 M413 M431 M510
        M521 M530 M540 M782 M904 M905 M910 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
```

```
DCN: R01257-K; R01257-T; R01257-M
M2 *21* G013 G019 G100 H5 H542 H8 K0 L3 L340 L399 M280 M315 M321
         M332 M342 M383 M391 M414 M431 M510 M520 M532 M540 M782 M904 M905
         P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
         DCN: R09295-K; R09295-T; R09295-M; R14775-K; R14775-T; R14775-M
M2 *22* D011 D021 D029 D240 G017 G100 H4 H401 H461 H5 H543 H8 J5 J521 L9 L942 M1 M112 M210 M211 M272 M283 M320 M412 M431 M511
         M520 M531 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434
         P446 P452 P631 P632 P633
         RIN: 02826
         DCN: R04080-K; R04080-T; R04080-M
M2 *23* D013 D021 D030 D240 J5 J521 L9 L942 L980 M210 M211 M240 M283
         M320 M412 M431 M511 M520 M530 M540 M782 M904 M905 P210 P220 P310
         P330 P431 P433 P434 P446 P452 P631 P632 P633
         RIN: 66132
         DCN: R19215-K; R19215-T; R19215-M
   *24* G020 G021 G022 G341 H1 H103 H181 H4 H401 H481 H6
                                                             H602 H608
         H642 H685 H8 M210 M214 M231 M273 M282 M311 M313 M321 M332 M343
         M344 M373 M391 M414 M431 M510 M520 M531 M540 M782 M904 M905 P210
         P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
         DCN: R19175-K; R19175-T; R19175-M
M2 *25* F012 F014 F015 F016 F541 G013 G100 H1 H101 H122 H6 H602 H641
         L9 L910 M1 M113 M210 M212 M240 M281 M320 M413 M431 M510 M521
         M531 M540 M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434
         P446 P452 P631 P632 P633
        DCN: R00153-K; R00153-T; R00153-M; R14989-K; R14989-T; R14989-M
M2 *26* D013 D021 D621 F012 F433 H4 H401 H481 H6 H685 H689 H8 M1
         M126 M132 M280 M311 M323 M343 M344 M353 M373 M391 M392 M412 M431
         M511 M521 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433
         P434 P446 P452 P631 P632 P633
        DCN: R11259-K; R11259-T; R11259-M; R14991-K; R14991-T; R14991-M
M281 M315 M321 M331 M342 M383 M391 M412 M431 M511 M520 M530 M540
        M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631
        P632 P633
        DCN: R14990-K; R14990-T; R14990-M; R14992-K; R14992-T; R14992-M
    *28* D013 D931 H1 H100 H121 J5 J592 J9 L9 L910 M280 M320 M412
        M431 M511 M520 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431
        P433 P434 P446 P452 P631 P632 P633
        DCN: RA03YY-K; RA03YY-T; RA03YY-M
M2
    *29* D011 D019 D970 F012 F013 F015 F113 H1
                                              H121 H2 H201 H4 H403
        H422 H481 H8 K0 L8 L813 L821 L834 M280 M311 M321 M342 M373
        M391 M412 M431 M511 M521 M530 M540 M782 M904 M905 P210 P220 P310
        P330 P431 P433 P434 P446 P452 P631 P632 P633
        RIN: 44763 44763
        DCN: R03766-K; R03766-T; R03766-M; R10155-K; R10155-T; R10155-M
M2
   *30* F012 F014 F015 F542 H6 H601 H621 J5 J522 L9 L910 M280 M320
        M413 M431 M510 M521 M530 M540 M782 M904 M905 M910 P210 P220 P310
        P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R00165-K; R00165-T; R00165-M; R14958-K; R14958-T; R14958-M
M2 *31* D011 D931 J5 J592 J9 L9 L943 M280 M320 M412 M431 M511 M520
        M530 M540 M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434
        P446 P452 P631 P632 P633
        DCN: R00020-K; R00020-T; R00020-M
M2 *32* D011 D931 F011 F014 F015 F521 H1 H181 H2 H201 H3
        H592 H9 L9 L943 L999 M1 M126 M142 M210 M211 M273 M281 M320
        M412 M431 M511 M521 M530 M540 M782 M904 M905 M910 P210 P220 P310
        P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R01259-K; R01259-T; R01259-M
M2 *33* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4 H402 H421
```

```
H604 H621 H8 J5 J522 K0 L8 L813 L821 L834 L9
        L910 M280 M311 M321 M342 M373 M391 M413 M431 M510 M522 M530 M540
        M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434 P446 P452
        P631 P632 P633
        DCN: R00084-K; R00084-T; R00084-M
M2 *34* D013 D931 H1 H100 H121 J5 J592 J9 L9 L910 M280 M320 M412
        M431 M511 M520 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431
        P433 P434 P446 P452 P631 P632 P633
        DCN: R08236-K; R08236-T; R08236-M
M2 *35* D011 D013 D931 F012 F013 F015 F113 H1 H100 H122 H2 H201 H4
        H402 H421 H481 H6 H602 H621 H8 L943 M280 M311 M321 M342 M373
        M391 M412 M431 M511 M521 M530 M540 M782 M904 M905 P210 P220 P310
        P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA035K-K; RA035K-T; RA035K-M
M2 *36* F011 F012 F013 F014 F015 F019 F113 F542 H1
                                                   H100 H121 H2 H211
        H4 H403 H422 H481 H8 J5 J521 K0 L8 L811 L821 L834 L9
        L910 M280 M311 M321 M342 M373 M391 M413 M431 M510 M522 M530 M540
        M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631
        P632 P633
        DCN: RA021Q-K; RA021Q-T; RA021Q-M
M2 *37* D011 D013 D931 F012 F013 F014 F015 F113 H1 H100 H122 H2
        H4 H403 H422 H481 H6 H601 H621 H8 L943 M280 M311 M321 M342
        M373 M391 M412 M431 M511 M521 M530 M540 M782 M904 M905 P210 P220
        P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RAOCGV-K; RAOCGV-T; RAOCGV-M
M2 *38* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4 H402 H421
        H481 H6  H604 H682 H7  H721 H8  J5  J522 L9  L910 M280 M311
        M312 M321 M332 M342 M353 M373 M391 M413 M431 M510 M522 M530 M540
        M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631
        P632 P633
        DCN: RA8S3P-K; RA8S3P-T; RA8S3P-M
M2 *39* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4 H403 H422
        H481 H7 H715 H721 H8 J5 J522 L9 L910 M210 M212 M240 M281
        M311 M321 M342 M373 M391 M413 M431 M510 M522 M530 M540 M782 M904
        M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA8S30-K; RA8S30-T; RA8S30-M
M2 *40* D011 D931 J5 J592 J9 L9 L943 M280 M320 M412 M431 M511 M520
        M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446
        P452 P631 P632 P633
        DCN: RA03YX-K; RA03YX-T; RA03YX-M
M2 *41* F011 F012 F013 F014 F015 F019 F113 F580 H1 H100 H121 H2 H211
        H4 H403 H422 H481 H8 J5 J521 K0 L8 L812 L821 L834 L9
        L910 L999 M280 M311 M321 M342 M373 M391 M413 M431 M510 M522 M530
        M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452
        P631 P632 P633
        RIN: 00212
        DCN: RA1SBO-K; RA1SBO-T; RA1SBO-M
    *42* F012 F013 F014 F015 F019 F113 F710 H4 H403 H422 H481 H8 J0
        M510 M522 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
        DCN: R20492-K; R20492-T; R20492-M
M2 *43* D011 D013 D840 F012 F013 F014 F015 F113 H1 H100 H122 H2 H201
        H4 H403 H422 H481 H8 J0 J011 J3 J311 L943 M280 M311 M321
        M342 M373 M391 M412 M431 M511 M521 M530 M540 M782 M904 M905 P210
        P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        RIN: 01261
        DCN: RA8D9S-K; RA8D9S-T; RA8D9S-M
M2 *44* D011 D019 D931 F012 F013 F014 F015 F113 H1 H100 H122 H2 H201
             H403 H422 H481 H8 K0 L8 L811 L821 L834 L943 M280 M311
```

```
M321 M342 M373 M391 M412 M431 M511 M521 M530 M540 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R06741-K; R06741-T; R06741-M
M2 *45* F011 F012 F013 F014 F015 F019 F113 F542 H2
                                                   H211 H4
        H481 H6
                  H601 H621 H8 J5
                                   J522 K0 L8
                                                  L813 L821 L834 L9
        L910 M280 M311 M321 M342 M373 M391 M413 M431 M510 M522 M530 M540
        M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434 P446 P452
        P631 P632 P633
        DCN: R00037-K; R00037-T; R00037-M
M2 *46* D011 D013 D931 H1 H100 H121 H181 H2 H201 H4 H401 H481 H8
            J521 L9 L910 M280 M314 M321 M332 M342 M383 M391 M412 M431
        M511 M520 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
        DCN: RA8RQM-K; RA8RQM-T; RA8RQM-M
M2 *47* D011 D013 D931 H1 H100 H121 H181 H2
                                             H201 H4 H401 H481 H5
        H581 H8
                J5 J521 K0 L6 L640 L9 L910 M280 M311 M312 M321
        M332 M342 M373 M383 M391 M412 M431 M511 M520 M530 M540 M782 M904
        M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R04178-K; R04178-T; R04178-M; RA04GU-K; RA04GU-T; RA04GU-M
M2 *48* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4 H403 H422
        H481 H8
                J5 J522 K0 L8 L812 L821 L834 L9 L910 M280 M311
        M321 M342 M373 M391 M413 M431 M510 M522 M530 M540 M782 M904 M905
        M910 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R00177-K; R00177-T; R00177-M
M2 *49* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4
                                                           H402 H421
        H481 H8 J5 J522 K0 L8 L813 L821 L834 L9 L910 M210 M211
        M240 M281 M311 M321 M342 M373 M391 M413 M431 M510 M522 M530 M540
        M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434 P446 P452
        P631 P632 P633
        DCN: R00036-K; R00036-T; R00036-M
M2 *50* F011 F012 F013 F014 F015 F019 F113 F432 H2 H211 H4 H403 H422
        H481 H8 J5 J522 K0 L8 L812 L821 L834 L9 L941 M280 M311
        M321 M342 M373 M391 M413 M431 M510 M522 M530 M540 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R08223-K; R08223-T; R08223-M
M2 *51* D012 D013 E530 H4 H402 H421 H481 H8 K0 L3 L355 L8
        L821 L834 L9 L943 M280 M311 M321 M342 M373 M391 M412 M431 M511
        M520 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434
        P446 P452 P631 P632 P633
        RIN: 08295
        DCN: R17554-K; R17554-T; R17554-M
M2 *52* D011 D013 E290 F012 F013 F014 F015 F113 H1 H100 H122 H2 H201
        M342 M373 M391 M412 M431 M511 M521 M530 M540 M782 M904 M905 P210
        P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        RIN: 50796
        DCN: RA804T-K; RA804T-T; RA804T-M
M2 *53* F011 F012 F013 F014 F015 F019 F113 F570 H2 H211 H4 H403 H422
        H481 H8 J0 J011 J3 J311 K0 L8 L812 L821 L834 M280 M311
        M321 M342 M373 M391 M413 M431 M510 M522 M530 M540 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        RIN: 00096
        DCN: R04428-K; R04428-T; R04428-M
M2 *54* D011 D013 D931 G036 G543 H1 H100 H121 H161 H2 H201 H4
        H482 H8 J5 J521 L9 L910 M280 M311 M322 M342 M373 M392 M412
        M431 M511 M520 M530 M541 M782 M904 M905 P210 P220 P310 P330 P431
        P433 P434 P446 P452 P631 P632 P633
        DCN: RA0U3W-K; RA0U3W-T; RA0U3W-M
M2 *55* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4
        H481 H6 H685 H8 J5 J522 L9 L910 M280 M311 M322 M342 M344
```

```
M353 M373 M391 M413 M431 M510 M522 M530 M540 M782 M904 M905 P210
         P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
         DCN: R06576-K; R06576-T; R06576-M; R23075-K; R23075-T; R23075-M
M2 *56* D011 D013 D931 H1 H100 H121 H181 H2 H201 H4 H402 H482 H5
                  J5 J521 K0 L6 L640 L9
         H581 H8
                                               L910 M280 M311 M313 M321
         M332 M342 M343 M383 M392 M412 M431 M511 M520 M530 M540 M782 M904
         M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
         DCN: R06407-K; R06407-T; R06407-M
    *57* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4
         H481 H8
                 J5 J522 L9 L910 M210 M212 M240 M281 M311 M321 M342
         M373 M391 M413 M431 M510 M522 M530 M540 M782 M904 M905 P210 P220
         P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R10039-K; R10039-T; R10039-M
M2 *58* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4
                                                            H402 H421
         H481 H6
                  H603 H682 H7 H721 H8 J5 J522 K0 L8 L813 L821
                 L910 M280 M311 M312 M321 M332 M342 M353 M373 M391 M413
         L834 L9
        M431 M510 M522 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431
         P433 P434 P446 P452 P631 P632 P633
        DCN: R04821-K; R04821-T; R04821-M
M2 *59* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4 H402 H421
        H481 H6
                 H602 H681 H8 J5 J522 L9 L910 M280 M311 M312 M321
        M332 M342 M353 M373 M391 M413 M431 M510 M522 M530 M540 M782 M904
        M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA8S3Q-K; RA8S3Q-T; RA8S3Q-M
   *60* D011 D013 D931 H1 H100 H121 H181 H2
                                              H201 H4
                                                         H402 H482 H8
         J5 J521 L9 L910 M280 M314 M321 M332 M343 M383 M391 M412 M431
        M511 M520 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
        DCN: R23076-K; R23076-T; R23076-M
M2 *61* D011 D013 D931 H4 H402 H482 H8 J5 J522 L9 L910 M280 M315
        M321 M332 M343 M383 M391 M412 M431 M511 M520 M530 M540 M782 M904
        M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R21048-K; R21048-T; R21048-M
M2 *62* D011 D022 D621 H1 H102 H103 H121 H181 H6 H602 H641 M210 M212
        M273 M282 M315 M321 M331 M342 M383 M391 M412 M431 M511 M520 M530
        M540 M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434 P446
        P452 P631 P632 P633
        DCN: R00078-K; R00078-T; R00078-M; R14988-K; R14988-T; R14988-M
M2 *63* C316 G013 G019 G100 H1 H101 H142 K0 K4 K442 M1 M121 M142
        M280 M320 M414 M431 M510 M520 M532 M540 M782 M904 M905 M910 P210
        P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: R00472-K; R00472-T; R00472-M
M2 *64* F011 F012 F013 F014 F015 F019 F113 F542 H2 H211 H4 H403 H422
        H481 H8 J5 J522 L9 L910 M210 M211 M240 M281 M311 M321 M342
        M373 M391 M413 M431 M510 M522 M530 M540 M782 M904 M905 P210 P220
        P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA5TW2-K; RA5TW2-T; RA5TW2-M
M2 *65* D013 D931 F012 F013 F014 F015 F113 H1
                                              H100 H122 H2
        H403 H422 H481 H8 M280 M311 M321 M342 M373 M391 M412 M431 M511
        M521 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434
        P446 P452 P631 P632 P633
        DCN: RA8S3M-K; RA8S3M-T; RA8S3M-M
M2 *66* D011 D025 D030 E330 H1 H100 H141 H5 H521 H8
                                                       K0 L4 L463
        L9 L951 M210 M211 M240 M272 M281 M311 M321 M342 M373 M391 M412
        M431 M511 M520 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431
        P433 P434 P446 P452 P631 P632 P633
        RIN: 12848
        DCN: R03874-K; R03874-T; R03874-M
M2 *67* D012 D014 D770 H1 H181 H2 H201 J0
                                              J011 J1
        M210 M211 M212 M240 M273 M281 M320 M412 M431 M511 M520 M530 M540
```

```
M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434 P446 P452
        P631 P632 P633
        RIN: 01683
        DCN: R01243-K; R01243-T; R01243-M
M2 *68* D011 D019 D931 F012 F013 F014 F015 F113 G013 G100 H1
        J321 K0 L8 L812 L821 L834 L943 M210 M211 M272 M273 M281
        M282 M311 M312 M321 M332 M342 M343 M349 M371 M373 M391 M412 M431
        M511 M521 M531 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
        DCN: R11093-K; R11093-T; R11093-M
M2 *69* D011 D931 H1 H100 H121 L9 L943 M280 M320 M412 M431 M511 M520
        M530 M540 M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434
        P446 P452 P631 P632 P633
        DCN: R00318-K; R00318-T; R00318-Q; R00318-M; R18196-K; R18196-T;
             R18196-Q; R18196-M
M2 *70* D011 D931 J5 J521 L9 L941 M280 M320 M412 M431 M511 M520 M530
        M540 M782 M904 M905 M910 P210 P220 P310 P330 P431 P433 P434 P446
        P452 P631 P632 P633
        DCN: R00285-K; R00285-T; R00285-Q; R00285-M
M2 *71* D012 D013 D932 J5 J523 L9 L910 L921 M280 M320 M412 M431 M511
        M520 M530 M540 M782 M904 M905 M910 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
        DCN: R00295-K; R00295-T; R00295-Q; R00295-M; R09540-K; R09540-T;
             R09540-Q; R09540-M
M2 *72* F011 F012 F013 F014 F015 F017 F019 F113 F542 H1 H100 H121 H2
                 H402 H421 H481 H6 H601 H608 H622 H8 J5 J521 K0
        H211 H4
        L818 L834 L835 L9 L910 M280 M311 M321 M342 M373 M391 M413 M431
        M510 M522 M530 M540 M782 M904 M905 P210 P220 P310 P330 P431 P433
        P434 P446 P452 P631 P632 P633
        DCN: RAOEHO-K; RAOEHO-T; RAOEHO-Q; RAOEHO-M
M2 *73* D011 D019 D931 F012 F013 F014 F015 F113 H1 H102 H122 H2 H201
            H403 H422 H481 H6 H602 H683 H7 H721 H8 L943 M280 M311
        M314 M321 M331 M342 M362 M373 M391 M412 M431 M511 M521 M530 M540
        M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631
        P632 P633
        DCN: RA8RV7-K; RA8RV7-T; RA8RV7-Q; RA8RV7-M
M2 *74* D011 D019 D931 F012 F013 F014 F015 F113 H1 H102 H122 H2 H201
        H4 H404 H422 H482 H7 H721 H8 L943 M280 M311 M315 M321 M333
        M342 M373 M383 M391 M412 M431 M511 M521 M530 M540 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA68IY-K; RA68IY-T; RA68IY-O; RA68IY-M
M2 *75* B615 B701 B713 B720 B815 B831 D011 D019 D931 F012 F013 F014 F015
        F113 G060 G740 H1 H102 H122 H2 H201 H4 H402 H422 H8 L943
            M126 M143 M280 M311 M321 M342 M373 M391 M411 M431 M511 M521
        M530 M541 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446
        P452 P631 P632 P633
        RIN: 03624
        DCN: RA8RV3-K; RA8RV3-T; RA8RV3-Q; RA8RV3-M
   *76* D011 D019 D931 F012 F013 F014 F015 F113 G060 G740 H1 H102 H122
M2
        H2 H201 H4 H403 H422 H481 H8 L943 M1 M126 M143 M280 M311
        M321 M342 M373 M391 M412 M431 M511 M521 M530 M541 M782 M904 M905
        P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        RIN: 03624
        DCN: RA8RVO-K; RA8RVO-T; RA8RVO-O; RA8RVO-M
M2 *77* B615 B701 B713 B720 B815 B831 D011 D019 D931 F012 F013 F014 F015
        F019 F111 F113 H1 H102 H122 H2 H201 H4 H402 H422 H8 L943
        M280 M311 M322 M342 M373 M392 M411 M431 M511 M522 M530 M540 M782
        M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632
        P633
```

```
DCN: RA8RUV-K; RA8RUV-T; RA8RUV-Q; RA8RUV-M
   *78* D011 D019 D931 F012 F013 F014 F015 F019 F111 F113 H1
                                             L943 M280 M311 M322 M342
             H201 H4
                     H402 H422 H5 H581 H8
        M373 M392 M412 M431 M511 M522 M530 M540 M782 M904 M905 P210 P220
        P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RASRUT-K; RASRUT-T; RASRUT-Q; RASRUT-M
   *79* B615 B701 B713 B720 B815 B831 D011 D019 D931 F012 F013 F014 F015
        F113 G010 G100 H1 H102 H122 H2 H201 H4 H402 H422 H8 L943
        M280 M311 M322 M342 M373 M392 M411 M431 M511 M521 M531 M540 M782
        M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452 P631 P632
        P633
        DCN: RA8RUP-K; RA8RUP-T; RA8RUP-Q; RA8RUP-M
   *80* D011 D019 D931 F012 F013 F014 F015 F113 G010 G100 H1
                                                           H100 H122
        H2 H201 H4 H402 H422 H5 H581 H8 L943 M280 M311 M322 M342
        M373 M392 M412 M431 M511 M521 M531 M540 M782 M904 M905 P210 P220
        P310 P330 P431 P433 P434 P446 P452 P631 P632 P633.
        DCN: RA8RUM-K; RA8RUM-T; RA8RUM-Q; RA8RUM-M
M2 *81* B615 B701 B713 B720 B815 B831 D011 D019 D931 F012 F013 F014 F015
                 F113 H1
        M232 M273 M281 M311 M321 M342 M373 M391 M411 M431 M511 M521 M530
        M540 M782 M904 M905 P210 P220 P310 P330 P431 P433 P434 P446 P452
        P631 P632 P633
        DCN: RA8RXC-K; RA8RXC-T; RA8RXC-Q; RA8RXC-M
M2 *82* D011 D019 D931 F012 F013 F014 F015 F113 H1 H102 H122 H2
        H4 H403 H422 H481 H8 L943 M210 M215 M232 M273 M281 M311 M321
        M342 M373 M391 M412 M431 M511 M521 M530 M540 M782 M904 M905 P210
        P220 P310 P330 P431 P433 P434 P446 P452 P631 P632 P633
        DCN: RA8RX5-K; RA8RX5-T; RA8RX5-Q; RA8RX5-M
M2
   *87* H1 H103 H181 H7 H721 J0 J011 J1
                                             J171 M210 M211 M273 M282
        M315 M321 M331 M342 M381 M391 M416 M431 M782 M904 M905
        DCN: RA7Q0X-K; RA7Q0X-Q; RA7Q0X-M
M2
   *88* H7 H721 J0 J011 J2 J271 M210 M211 M213 M232 M262 M272 M281
        M320 M416 M431 M782 M904 M905 M910
        DCN: R00479-K; R00479-Q; R00479-M
```

=> d ibib abs hitstr 161 1-24

L61 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:151888 HCAPLUS

DOCUMENT NUMBER:

137:226208

TITLE:

Inhibitory effects of flavonoids on human

immunodeficiency virus type-1 integrase

AUTHOR (S):

Tewtrakul, Supinya; Miyashiro, Hirotsugu; Hatrori, Masao; Yoshinaga, Tomokazu; Fujiwara, Tamio; Tomimori,

Tsuyoshi; Kizu, Haruhisa; Miyaichi, Yukinori

CORPORATE SOURCE:

Institute of Natural Medicine, Toyama Medical and Pharmaceutical University, Toyama, 930-0194, Japan

SOURCE:

Wakan Iyakugaku Zasshi (2001), 18(6),

229-238

CODEN: WIZAEL; ISSN: 1340-6302

PUBLISHER:

Wakan Iyaku Gakkai

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB One hundred and eighty-three flavonoids were screened for their inhibitory effects on HIV-1 integrase (IN) using a multiplate integration assay (MIA). Of the tested flavonoids, 6-hydroxyluteolin, scutellarein, pedalitin, scutellarin, baicalein dimer, hypolaetin, 7-0-benzyl-6-hydroxyluteolin and baicalein showed appreciable inhibition with IC50 values of 0.4, 0.6, 1.3, 1.7, 2.0, 2.1, 3.0 and 3.6 μM, resp. The potent inhibition was observed with flavonoids having at least one pair of vicinal hydroxyl groups and the activity was highly dependent on the number

vicinal hydroxyl groups and the activity was highly dependent on the number of vicinal hydroxyl groups. On the other hand, the inhibitory activity tended to be decreased by replacing a hydroxyl group with one of methoxyl, acetoxyl, isopropoxyl, isopentenyl, benzyloxyl, glucuronyl and glycosyl groups. No flavanones, flavanonols and chalcones examined in this experiment showed any significant inhibitory activity.

onowed any significant inhibitory activ

IT 973-67-1 34334-69-5, Cirsiliol

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitory effects of flavonoids on human immunodeficiency virus type-1 integrase)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

RN 34334-69-5 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L61 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2001:50468 HCAPLUS DOCUMENT NUMBER: 134:110442 TITLE: Use of flavones, coumarins and related compounds to treat infections Prendergast, Patrick T. INVENTOR(S): PATENT ASSIGNEE(S): Ire. SOURCE: PCT Int. Appl., 70 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ------------------------WO 2001003681 A2 20010118 WO 2000-IB1039 20000707 <--WO 2001003681 A3 20020510 W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 20010118 CA 2000-2375647 CA 2375647 AA20000707 <--EP 1223928 A2 20020724 EP 2000-948187 20000707 <--RE AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 2003504327 T2 20030204 JP 2001-508962 20000707 <--US 6555523 **∀B1** 20030429 US 2000-612025 20000707 <--PRIORITY APPLN. INFO.: US 1999-142894P P 19990708 <--US 1999-163089P P 19991102 <--WO 2000-IB1039 W 20000707 <--OTHER SOURCE(S): MARPAT 134:110442 The invention provides the use of flavin compds. such as cirsiliol, 3',4'-diacetoxy-5,6,7-trimethoxyflavone, or naringin in the treatment of infections, particularly for viral (e.g., HCV, HIV, a picornavirus genus virus or a respiratory virus) or parasite (e.g., toxoplasmosis) infections. Also provided are compns. for use in the methods. IT 973-67-1, Baicalein trimethyl ether 34334-69-5, Cirsiliol 34334-69-5D, Cirsiliol, derivs. RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (flavones, coumarins, and related compds. to treat infections) RN973-67-1 HCAPLUS

4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

CN

RN 34334-69-5 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(9CI) (CA INDEX NAME)

RN 34334-69-5 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(9CI) (CA INDEX NAME)

L61 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:603194 HCAPLUS

DOCUMENT NUMBER: 129:211696

TITLE: Antimicrobial product comprising an antibiotic

and a potentiating flavonoid

INVENTOR(S): Richards, Robert Michael Edward; Durham, David Garnet;

Liu, Iain Xiaojun

PATENT ASSIGNEE(S): British Technology Group Ltd., UK

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.			KIN		DATE			APPL	ICAT:	ION I	NO.		Di	ATE	
	-				-											
WO 9836	750			A1		1998	0827	1	WO 1	998-0	GB51	2		1	9980	218 <
W:	ΑL,	AM,	ΑT,	AU,	ΑZ,	ВA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
	DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,
	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
	UA,	UG,	US,	UΖ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM
RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	ŪĠ,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,

FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG CA 2281524 AΑ 19980827 CA 1998-2281524 19980218 <--AU 9861081 A1 19980909 AU 1998-61081 19980218 <--AU 726471 **B2** 20001109 ZA 9801337 Α 19990818 ZA 1998-1337 19980218 <--EP 973523 **A1** 20000126 EP 1998-905514 19980218 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE BR 9807444 Α 20000425 BR 1998-7444 19980218 <--JP 2001512473 T2 20010821 JP 1998-536379 19980218 <--MX 9907686 20000228 Α MX 1999-7686 19990819 <--PRIORITY APPLN. INFO.: GB 1997-3532 19970220 <--Α GB 1997-26401. Α 19971212 <--WO 1998-GB512 W 19980218 <--

OTHER SOURCE(S):

MARPAT 129:211696

Ι

GI

AB An antimicrobial product is disclosed which comprises, for simultaneous, sep. or sequential administration, a flavonoid I (R3, R5, R6, R7, R8, Ra, Rb, Rc, Rd, Re = H, OZ; Z= H, lower alkyl, glycosyl, leaving group; X, Y = H, or X and Y together is a double bond), or a pharmaceutically acceptable salt thereof; and an antibiotic. The flavonoid may be present in such an amount so as to potentiate the action of the antibiotic. When the antibiotic is a β -lactam antibiotic, the resulting medicament may be used for treating or preventing bacterial infections which are at least partially resistant to treatment by the β -lactam antibiotic alone.

IT 973-67-1, 5,6,7-Trimethoxyflavone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antibiotic and a potentiating flavonoid for antimicrobial
product)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:451935 HCAPLUS

DOCUMENT NUMBER:

127:171111

TITLE:

Antiviral activity of 5,6,7-

trimethoxyflavone and its potentiation of the

antiherpes activity of acyclovir

AUTHOR (S):

Hayashi, Kyoko; Hayashi, Toshimitsu; Otsuka, Hidaeki;

Takeda, Yoshio

CORPORATE SOURCE:

Department of Virology, Toyama Medical and

Pharmaceutical University, Toyama, 930-01, Japan

SOURCE:

Journal of Antimicrobial Chemotherapy (1997

), 39(6), 821-824

CODEN: JACHDX; ISSN: 0305-7453

Oxford University Press

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB A naturally occurring flavone, 5,6,7-trimethoxyflavone (TMF), isolated from the plant Callicarpa japonica, was subjected to antiviral assays. The compound exhibited relatively high inhibitory effects on herpes simplex virus type 1 (HSV-1), human cytomegalovirus and poliovirus. The anti-HSV-1 action was not due to the inhibition of virus adsorption, entry and viral protein synthesis, but might involve, at least in part, a virucidal activity, which results in a suppression of viral binding to host cells at an early replication stage. TMF and acyclovir were synergistic in their anti-HSV activities at levels below the 50% inhibitory concns. for antiviral activity.

IT 973-67-1, 5,6,7-Trimethoxyflavone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiviral activity of 5,6,7-trimethoxyflavone and potentiation of antiherpes activity of acyclovir)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

L61 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:120329 HCAPLUS

DOCUMENT NUMBER:

124:289188

TITLE:

Synthesis, antimicrobial and antiviral activities of novel polyphenolic compounds

AUTHOR(S):

Parmar, V. S.; Bisht, K. S.; Jain, Rajni; Singh, Suddham; Sharma, S. K.; Gupta, Suman; Malhotra,

CORPORATE SOURCE:

Sanjay; Tyagi, O. D.; Vardhan, Anand; et al. Dep. Chem., Univ. Delhi, Delhi, 110 007, India

SOURCE:

Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1996

), 35B(3), 220-32

CODEN: IJSBDB; ISSN: 0376-4699

PUBLISHER: Publications & Information Directorate, CSIR

DOCUMENT TYPE: Journal LANGUAGE: English

AB Natural and synthetic phenolic compds. belonging to the classes of flavones, coumarins, xanthones, chalcones, isoflavones and desoxybenzoins have been prepared or isolated from plant species, characterized and tested against a battery of 10 pathogenic bacteria, 1 yeast, 3 fungi and 3 viruses. Only two of the compds. show some moderate bacteriostatic activity against gram-pos. cocci, but are like all other products inactive against gram-neg. bacteria, yeasts and fungi. On the contrary, two flavones, one desoxybenzoin and one diacetoxycoumarin exhibited pronounced antiviral properties against some of the viruses tested. Five other coumarin analogs possessed moderate anti-poliomyelitis properties and one xanthone is to a lesser extent active against Vesicular stomatitis virus. Of the compds. synthesized nine are new compds.

IT 973-67-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(synthesis, antimicrobial and **antiviral** activities of novel polyphenolic compds.)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

PUBLISHER:

L61 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:1006222 HCAPLUS

DOCUMENT NUMBER: 124:134764

TITLE: Cytocidal and antimicrobial activities of flavonoids
AUTHOR(S): Funayama, Shinji; Komiyama, Kanki; Miyaichi, Yukinori;

Tomimori, Tsuyoshi; Nozoe, Shigeo

CORPORATE SOURCE: Fac. Pharmaceutical Sciences, Tohoku Univ., Sendai,

980, Japan

SOURCE: Natural Medicines (1995), 49(3), 322-8

CODEN: NMEDEO; ISSN: 1340-3443 Japanese Society of Pharmacognosy

DOCUMENT TYPE: Journal LANGUAGE: English

AB One hundred and eighty-two flavonoids were studied for their cytocidal activities on B16 melanoma cells in vitro and antimicrobial activities on Bacillus—subtilis, Staphylococcus aureus, Escherichia coli, Saccharomyces sake, Micrococcus luteus, Staphylococcus aureus, Candida albicans and Piricularia oryzae. Twelve flavonoids showed moderate cytocidal

activities and 25 flavonoids antimicrobial activities. Most of the flavanones having no sugar moiety showed antimicrobial activities whereas none of the flavonols and flavonolignans tested showed inhibitory

activities on these microorganisms.

TT 973-67-1 34334-69-5 172918-51-3

973-67-1 34334-69-5 172918-51-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(cytocidal and antimicrobial activities of flavonoids)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

RN34334-69-5 HCAPLUS

4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(CA INDEX NAME)

RN 172918-51-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-iodo-5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

L61 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1995:963493 HCAPLUS

DOCUMENT NUMBER:

124:8616

TITLE:

Preparation of pyrone derivatives as protease

inhibitors and antiviral agents

INVENTOR(S):

Domagala, John Michael; Lunney, Elizabeth; Para, Kimberly Suzanne; Prasad, Josyula Venkata Nagendr;

Tait, Bradley Dean

PATENT ASSIGNEE(S):

Parke, Davis and Co., USA

SOURCE:

PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9514013	A1	19950526	WO 1994-US12257	19941026 <
W: AM, AU, BG,	BY, CA	, CZ, EE, FI	, GE, HU, JP, KG, KR,	KZ, LT, LV,

```
MD, NO, NZ, PL, RO, RU, SI, SK, TJ, UA, UZ
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     US 6005103
                           Α
                                 19991221
                                              US 1994-319769
                                                                      19941012 <--
     AU 9480911
                           A1
                                 19950606
                                              AU 1994-80911
                                                                      19941026 <--
     AU 687465
                           B2
                                 19980226
     EP 729465
                           A1
                                              EP 1994-932042
                                 19960904
                                                                      19941026 <--
     EP 729465
                           B1
                                 20030122
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     JP 09505293
                                 19970527
                           T2
                                              JP 1994-514457
                                                                      19941026 <--
     RU 2136674
                           C1
                                 19990910
                                              RU 1996-113097
                                                                      19941026 <--
     AT 231502
                           Ε
                                              AT 1994-932042
                                 20030215
                                                                      19941026 <--
     FI 9602020
                           Α
                                 19960531
                                              FI 1996-2020
                                                                      19960513 <-'-
     NO 9602016
                           Α
                                 19960515
                                             NO 1996-2016
                                                                      19960515 <--
     NO 315747
                           B1
                                 20031020
PRIORITY APPLN. INFO.:
                                              US 1993-155028
                                                                     19931119 <--
                                              US 1994-319769
                                                                  Α
                                                                     19941012 <--
                                              WO 1994-US12257 -
                                                                  W
                                                                     19941026 <--
OTHER SOURCE(S):
                          MARPAT 124:8616
GΙ
```

Ι

$$R^{5}$$
 $(CH_{2})_{n}W^{2}A^{1}(CH_{2})_{m}W^{3}R^{3}$
 $W(CH_{2})_{n}A$
 Y
 Z
 $R^{3}W^{1}(CH_{2})_{m}$

AB Title compds. [I; A,A1 = bond, phenylene, cycloalkylene, etc.; R3 = H, (CH2)pR4, etc.; R4 = H, (cyclo)alkyl, Ph, etc.; R5 = = H, (cyclo)alkyl, Ph, etc.; X = OR1, NHR1, CH2OR1, CO2R4; R1 = R4 or COR4; W, W1, W3 = bond, O, CO, CH:CH, etc.; W2 = CR3, CO, CO2, CH:CH, etc. when n = 0; W2 = bond, O, NR3, etc. when n>0; m,n = 0-4; p = 0-2; Z,Y = O or S] were prepared Thus, 2-(Me2HC)C6H4(CO2Et)2 was cyclocondensed with 4-(pyridin-3-ylmethoxy)acetophenone to give title compound II which had IC50 of 0.65μM against HIV-1 activity in H9 cells in vitro.

Searched by Mary Jane Ruhl x 22524

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of pyrone derivs. as protease inhibitors and antiviral
 agents)

RN 13909-73-4 HCAPLUS

CN Ethanone, 1-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

L61 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:951171 HCAPLUS

DOCUMENT NUMBER: 123:339737

TITLE: Preparation of pyrone derivatives as protease

inhibitors and antiviral agents

INVENTOR(S): Domagala, John Michael; Ellsworth, Edmund Lee; Lunney,

Elizabeth; Ortwine, Daniel Fred; Para, Kimberly Suzanne; Prasad, Josyula Venkata Nagendr; Sawyer,

Tomi; Tait, Bradley Dean Parke, Davis and Co., USA PCT Int. Appl., 159 pp.

SOURCE: PCT Int. Appl CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

GI

PATENT ASSIGNEE(S):

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 9514014 WO 9514014		WO 1994-US12367	19941026 <
	BY, CA, CZ, EE, PL, RO, RU, SI,	FI, GE, HU, JP, KG, SK, TJ, UA, UZ	KR, KZ, LT, LV,
		GB, GR, IE, IT, LU,	
US 5808062	A 19980915	US 1994-319768	19941012 <
AU 9481276	A1 19950606	AU 1994-81276	19941026 <
AU 682417	B2 19971002		
EP 729466	A1 19960904	EP 1995-900457	19941026 <
		GB, GR, IE, IT, LI,	
JP 09505295			19941026 <
RU 2153497	C2 20000727	RU 1996-113056	19941026 <
FI 9602019	A 19960520	FI 1996-2019	19960513 <
NO 9602015	A 19960515	NO 1996-2015	19960515 <
PRIORITY APPLN. INFO.:		US 1993-155028	A 19931119 <
•		US 1994-319768	
	· •		W 19941026 <
OTHER SOURCE(S):	MARPAT 123:3397		· · · · · · - - · · · · · · · · · · · ·

AB Title compds. [I; R = OR1, NHR1, CH2OR1, SR1, CO2R4; R1 = R4 or COR4; R4 =
H, (cyclo)alkyl, Ph, heteroaryl; R5 = H, (cyclo)alkyl, Ph, etc.; R6 =
A(CH2)nW(CH2)mW1R3; R3 = H, (CH2)pR4, etc.; R7 = W2A1(CH2)mW3R3; A,A1 =
bond, phenylene, heterocyclylene, etc.; W,W1,W3 = bond, O, NR3, CO, etc.;
W2 = O, S, NR3, O2C, etc.; Y,Z = O or S; m,n = 0-4; p = 0-2] were prepared
Thus, 4-(R3H2CO)C6H4COMe (R3 = 3-pyridyl) was converted to the
O-trimethylsilyl enol ether which was cyclocondensed with
2-(Me3HC)C6H4S(CO2Et)2 to give title compound II. The latter had EC50 of
0.65μM for protection of H9 cells against HIV-1 infection in vitro.
IT 13909-73-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrone derivs. as protease inhibitors and antiviral agents)

RN 13909-73-4 HCAPLUS

CN Ethanone, 1-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

L61 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1
DOCUMENT NUMBER: 1

1994:298442 HCAPLUS 120:298442

TITLE:

Antitumor Agents. 150. 2',3',4',5',5,6,7-Substituted 2-Phenyl-4-quinolones and Related Compounds: Their Synthesis, Cytotoxicity, and Inhibition of Tubulin

Polymerization

AUTHOR (S):

Li, Leping; Wang, Hui-Kang; Kuo, Sheng-Chu; Wu, Tian-Shung; Lednicer, Dan; Lin, Chii M.; Hamel,

Ernest; Lee, Kuo-Hsiung

CORPORATE SOURCE:

School of Pharmacy, University of North Carolina at

Chapel Hill, Chapel Hill, NC, 27599, USA Journal of Medicinal Chemistry (1994),

37(8), 1126-35

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal English

LANGUAGE:

SOURCE:

GI

$$R^3$$
 R^4
 R^2
 R^2
 R^1
 R^2
 R^3
 R^4
 R^2
 R^3
 R^4
 R^5
 R^5

As part of the continuing search for potential anticancer drug candidates in the 2-phenyl-4-quinolone series, a series of 6,7-methylenedioxy-substituted and unsubstituted 2-phenyl-4-quinolones, as well as related compds. were prepared Their in vitro inhibition of human tumor cell lines and tubulin polymerization is reported. In general, a good correlation was found between cytotoxicity and inhibition of tubulin polymerization Quinolones I [R = R2 = H, R3R4 = OCH2O, R1 = H, OMe, NMe2; R =

H,

R1, R2 = OMe, R3R4 = OCH2O; R = F, Cl, R1, R2 = H, R3R4 = OCH2O; R = R2 = R4 = H, R1 = NMe2, OMe, R3 = OMe] showed potent inhibitory effects in both assays. All rigid analogs II [n = 2, 3, R5 = H; n = 2, R5 = OMe] and trimethoxy-substituted compds. showed little or no activity. Substitution at the 4'-position also resulted in compds. with little or no activity, except for hydroxyl or Me groups at this position. Further investigation is underway to determine if substitution at the 3'-position will result in compds. with increased activity.

RN 13909-73-4 HCAPLUS

CN Ethanone, 1-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

L61 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1992:524131 HCAPLUS

DOCUMENT NUMBER:

117:124131

TITLE:

Growth inhibition of human malignant glioma cells in vitro by agents which interfere with biosynthesis of

eicosanoids

AUTHOR(S):

Blomgren, Henric; Kling-Andersson, Gunilla

CORPORATE SOURCE: Radiumhemmet, Karolinska Hosp., Stockholm, 104 01,

Swed

SOURCE:

Anticancer Research (1992), 12(3), 981-6

CODEN: ANTRD4; ISSN: 0250-7005

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB In an attempt to find new methods for the treatment of malignant gliomas, a number of tests have been performed to learn whether growth of such cells in vitro may be affected by agents which interfere with the biosynthesis of eicosanoids. It was observed that DNA-synthesis of short-term monolayer cultures could be blocked by compds. which inhibit cyclooxygenase and/or lipoxygenase dependent arachidonic acid metabolism The strongest inhibitory activities were noted in serum-free culture medium using compds. interfering with the activity of lipoxygenases. One explanation of these results could be that the growth of human malignant gliomas is dependent on certain eicosanoids which may be synthesized by the malignant cells themselves.

34334-69-5, Cirsiliol IT

RL: BIOL (Biological study)

(as eicosanoid formation inhibitor, glioma of humans growth inhibition

RN34334-69-5 HCAPLUS

4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-CN (CA INDEX NAME)

L61 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:466636 HCAPLUS

DOCUMENT NUMBER: 117:66636

TITLE: Antimicrobial constituents of Gomphrena martiana and

Gomphrena boliviana

AUTHOR (S): Pomilio, Alicia B.; Buschi, Carlos A.; Tomes, Claudia

N.; Viale, Alberto A.

CORPORATE SOURCE: Fac. Cienc. Exactas Nat., Univ. Buenos Aires, Buenos

Aires, 1428, Argent.

Journal of Ethnopharmacology (1992), 36(2), SOURCE:

155-61

CODEN: JOETD7; ISSN: 0378-8741

DOCUMENT TYPE: Journal LANGUAGE: English

The antimicrobial activity of exts. and constituents of G. martiana and G. boliviana (Amaranthaceae) were determined to identify the compds. responsible for the folk-medicinal use of these plants. Each extract was evaluated against 20 microorganisms, including gram-pos. and gram-neq. bacteria, spore-forming gram-pos. bacteria, an acid-fast bacterium, a fungus and two yeasts. Fractionation of each petroleum ether (PE) extract yielded five 5,6,7-trisubstituted flavones that were sep. tested showing high activity against Mycobacterium phlei (min. inhibitory concentration (MIC) 15, 20 and 75 μg/mL) approaching that of com. bactericides. Other natural and synthetic flavonoids with diverse structures were also tested to define structure-activity relationships. Each EtOH extract was subsequently fractionated and monitored by bioassays leading to isorhamnetin 3-0- β -robinobioside (MIC 50 μ g/mL) in both instances. This glycoside is reported here for the first time in G. boliviana. IT

75413-07-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(from Gomphrena species, antimicrobial activity of)

RN 75413-07-9 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3,5,6,7-tetramethoxy-2-phenyl- (9CI) (CA INDEX NAME)

L61 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:187627 HCAPLUS

DOCUMENT NUMBER: 116:187627

TITLE: Ru 41.740 triggers human mononuclear blood cells to

release tumor growth inhibitory factors in vitro

AUTHOR(S): Blomgren, Henric

CORPORATE SOURCE: Karolinska Hosp., Stockholm, S-104 01, Swed.

SOURCE: International Journal of Immunopharmacology (

1992), 14(2), 185-90

CODEN: IJIMDS; ISSN: 0192-0561

DOCUMENT TYPE: Journal LANGUAGE: English

AB Ru 41.740 (Biostim) is an immunostimulating **drug** of microbial origin which may stimulate human mononuclear blood cells (mainly monocytes) to release soluble factors which inhibit replication of several tumor cell lines in vitro. Since this effect may be of clin. importance in the treatment of cancer, tests have been conducted to find methods to augment this secretion. In vitro tests suggested that this non-specific antitumor activity of Biostim may not be enhanced by concomitant treatment of patients with inhibitors of cyclooxygenase and lipoxygenases or by interferons α , β , γ or the hemopoietic growth factors GM-CSF and G-CSF.

IT 34334-69-5, Cirsiliol

RL: BIOL (Biological study)

(Ru 41.740 antitumor activity response to, in human monocytes)

RN 34334-69-5 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(9CI) (CA INDEX NAME)

L61 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:423280 HCAPLUS

DOCUMENT NUMBER: 113:23280

TITLE: Chalcones: a new class of antimitotic agents
AUTHOR(S): Edwards, Michael L.; Stemerick, David M.; Sunkara,

Prasad S.

CORPORATE SOURCE:

Merrell Dow Res. Inst., Cincinnati, OH, 45215, USA

SOURCE:

Journal of Medicinal Chemistry (1990),

33(7), 1948-54

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 113:23280

A series of chalcones was evaluated as antimitotic agents. One of these, (E)-2,5-(MeO)2C6H3COCMe:CHC6H4NMe2 (I), was an effective antimitotic agent at 4 nM in an in vitro HeLa cell test system. When evaluated in exptl. tumor models in vivo, I exhibited antitumor activity against L1210 leukemia and B16 melanoma.

13909-73-4 TT

> RL: RCT (Reactant); RACT (Reactant or reagent) (condensation reaction of, with (diethylamino) - or acetamidobenzaldehyde)

RN 13909-73-4 HCAPLUS

CN Ethanone, 1-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

L61 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1989:449912 HCAPLUS

DOCUMENT NUMBER:

111:49912

TITLE:

Effect of chemical constituents from plants on 12-O-tetradecanoylphorbol-13-acetate-induced

inflammation in mice

AUTHOR (S):

Yasukawa, Ken; Takido, Michio; Takeuchi, Mieko;

Nakagawa, Shiqeki

CORPORATE SOURCE:

Coll. Sci. Technol., Nihon Univ., Tokyo, 101, Japan

SOURCE:

Chemical & Pharmaceutical Bulletin (1989),

37(4), 1071-3

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

The induction of edema in the mouse ear is a reliable in vivo assay for tumor promoters. Therefore, inhibitors of 12-0-tetradecanoylphorbol-13acetate (TPA) -induced ear edema are most likely to be inhibitors of skin tumor promotion. Besides the application for this assay for the screening of compds., it also allows comparison of the activities of groups of related compds. such as flavonoids. Results obtained in this way showed that the double bond at C-2 and C-3 of the flavonoid structure is a prerequisite for antitumor-promoting activity, and indicated that activity in this screening assay for inhibitors of TPA-induced ear edema reflects the antitumor-promoting effect in 2-stage carcinogenesis.

IT 973-67-1

RL: BIOL (Biological study)

(anti-tumor-promoting activity of, in TPA-induced inflammation model, structure in relation to)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

L61 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:417724 HCAPLUS

DOCUMENT NUMBER: 111:17724

TITLE: Chalcone derivatives useful in treating gout and their

preparation

INVENTOR(S): Edwards, Michael L.; Stemerick, David M.; Sunkara, Sai

PATENT ASSIGNEE(S): Merrell Dow Pharmaceuticals, Inc., USA

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-			
EP 287901	A1	19881026	EP 1988-105541	19880407 <
EP 287901	B1	19900801		
R: AT, BE, CH,	DE, ES	, FR, GB, GR	, IT, LI, LU, NL, SE	
AU 8814165	A1	19881013	AU 1988-14165	19880405 <
AU 608821	B2	19910418		
ZA 8802388	Α	19881130	ZA 1988-2388	19880405 <
AT 55108	E	19900815	AT 1988-105541	19880407 <
US 4863968	Α	19890905	US 1988-285331	19881214 <
PRIORITY APPLN. INFO.:		•	US 1987-36214 A	19870409 <
		`	EP 1988-105541 A	19880407 <
OTHER SOURCE(S):	MARPAT	111:17724		

GI

$$Ar - \overset{O}{C} - C(R^1) = CH - R^2$$

AB Chalcone derivs. I [Ar = 2,5-dimethoxyphenyl, 2,3,4-trimethoxyphenyl, or 3,4,5-trimethoxyphenyl; R1 = H, Br, Cl, or C1-4 alkyl; R2 = NR2 or NHC(0)R (R = C1-4 alkyl)] and their pharmaceutically acceptable salts are described. I represents a new class of antimitotic agents and is applicable to treatment of gout. Preparation of I is detailed. 2,5-Dimethoxypropiophenone (0.09 mol), piperidine (1.8 mL), 4-dimethylaminobenzaldehyde (0.009 mol), EtOH (15 mL), and HOAc (0.9 mL) were refluxed through mol. sieves until the reaction was complete as indicated by TLC (25% EtOAc/hexane). Solvent was removed and α -methyl-4-dimethylamino-2',5'-dimethoxychalcone (II) was purified by silica el chromatog. and recrystn. HeLa cells were incubated for 1 h in the presence of II, then for an addnl. 18 h in medium free of II. Min.

effective concentration for mitotic arrest in the incubation assay was 0.06 $\mu g/mL$. A parenteral formulation contained II 1.0, polyoxyethylene sorbitan monooleate 2.0, and NaCl 0.128 g, and H2O q.s. ad 20.0 mL.

IT 13909-73-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with dimethylaminobenzaldehyde in gout inhibitor preparation)

RN 13909-73-4 HCAPLUS

CN Ethanone, 1-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

L61 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1989:417706 HCAPLUS

DOCUMENT NUMBER:

111:17706

TITLE:

Chalcone derivatives useful in controlling growth of

tumor tissue and their preparation

INVENTOR(S):

Edwards, Michael L.; Stemerick, David M.; Sunkara, Sai

Ρ.

PATENT ASSIGNEE(S):

Merrell Dow Pharmaceuticals, Inc., USA

SOURCE:

GI

Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 288794	A2	19881102	EP 1988-105540	19880407 <
EP 288794	A3	19881123		
EP 288794	B1	19940608		
R: AT, BE, CH,	DE, ES	, FR, GB, GR	, IT, LI, LU, NL, SE	
US 4904697	Α	19900227	US 1987-36227	19870409 <
AU 8814164	A1	19881013	AU 1988-14164	19880405 <
AU 599220	B2	19900712		
ZA 8802391	Α	19881130	ZA 1988-2391	19880405 <
AT 106723	E	19940615	AT 1988-105540	19880407 <
PRIORITY APPLN. INFO.:			US 1987-36227	A 19870409 <
			EP 1988-105540	A 19880407 <
OTHER SOURCE(S):	MARPAT	111:17706		

$$Ar - C - C(R^1) = CH - R^2$$

AB Chalcone derivs. I [Ar = 2,5-dimethoxyphenyl, 2,3,4-trimethoxyphenyl, or 3,4,5-trimethoxyphenyl; R1 = H, Br, Cl, or C1-4 alkyl; R2 = NR2 or NHC(O)R

(R = C1-4 alkyl)] and their pharmaceutically acceptable salts are described. I represents a new class of anti-mitotic agents useful in controlling growth of tumor tissue. Preparation of I is detailed. 2,5-Dimethoxypropiophenone (0.009 mol), piperidine (1.8 mL), 4-dimethylaminobenzaldehyde (0.009 mol), EtOH (15 mL), and HOAc (0.9 mL) were refluxed through mol. sieves until the reaction was complete as indicated by TLC (25% EtOAc/hexane). Solvent was removed and α -methyl-4-dimethylamino-2',5'-dimethoxychalcone (II) was purified by silica gel chromatog. and recrystn. Mice were inoculated i.p. with 1 + 105 L1210 leukemia cells on day zero of a standard animal survival protocol. II (6.25-50.0 mg/kg in 5% PVP) increased survival time by a factor of 1.26-1.54 over survival time for control animals. A parenteral formulation contained II 1.0, polyoxyethylene sorbitan monooleate 2.0, and NaCl 0.128 g, and H2O q.s. ad 20.0 mL.

IT 13909-73-4

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with dimethylaminobenzaldehyde in neoplasm inhibitor preparation)

RN13909-73-4 HCAPLUS

CN Ethanone, 1-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

L61 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:604515 HCAPLUS

DOCUMENT NUMBER: 109:204515

TITLE:

Effect of flavonoids on tumor promoter's activity AUTHOR (S): Yasukawa, K.; Takido, M.; Takeuchi, M.; Nitta, K.

Coll. Sci. Technol., Nihon Univ., Tokyo, 101, Japan CORPORATE SOURCE:

SOURCE: Progress in Clinical and Biological Research (

1988), 280 (Plant Flavonoids Biol. Med. 2: Biochem., Cell., Med. Prop.), 247-50

CODEN: PCBRD2; ISSN: 0361-7742

DOCUMENT TYPE: Journal LANGUAGE: English

The inflammation induced by the tumor promoter 12-0-tetradecanoylphorbol-13-acetate (TPA) in mouse ears was inhibited by some of the flavonoids tested. Also, the 2-step carcinogenesis by 7,12-dimethylbenz[a]anthracene and TPA in mice was inhibited by 4 flavonoids. The effect of the flavonoids on the cell-mediated immunosuppression in the 2-step carcinogenesis was also tested; none of the agents affected this process after 7 wk, but the immunosuppression observed by carcinogenesis after 14 wk was antagonized by mauritianin.

IT 973-67-1

RL: BIOL (Biological study)

(inflammation induction by tumor promoter TPA response to)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

L61 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1987:95685 HCAPLUS

DOCUMENT NUMBER:

106:95685

TITLE:

Arachidonate 5-lipoxygenase inhibitors show potent antiproliferative effects on human leukemia cell lines Tsukada, Tetsuya; Nakashima, Kunio; Shirakawa, Shigeru

AUTHOR (S):

Sch. Med., Mie Univ., Tsu, 514, Japan

CORPORATE SOURCE:

Biochemical and Biophysical Research Communications (

1986), 140(3), 832-6

CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Cirsiliol [34334-69-5] and AA861 [80809-81-0], specific arachidonate 5-lipoxygenase [80619-02-9] inhibitors, showed potent antiproliferative effects on human leukemic cell lines K562, Molt4B and HL60. On the other hand, HeLa cells were not affected by these drugs. In the inhibitor-treated and growth-retarded leukemia cells, the rates of synthesis of DNA, RNA and protein were markedly decreased. These results suggested that arachidonate 5-lipoxygenase or leukotrienes would play essential roles in cellular functions of leukemic cells.

IT 34334-69-5, Cirsiliol

RL: PRP (Properties)

(antiproliferative effects of, on leukemia cells of human)

RN 34334-69-5 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(9CI) (CA INDEX NAME)

L61 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1986:421715 HCAPLUS

DOCUMENT NUMBER:

105:21715

TITLE: AUTHOR(S):

Iridoids and flavonoids of Teucrium polium herb Rizk, A. M.; Hammouda, F. M.; Rimpler, H.; Kamel, A.

Sci. Appl. Res. Cent., Qatar Univ., Doha, Qatar

CORPORATE SOURCE: SOURCE:

Planta Medica (1986), (2), 87-8

Sounce.

CODEN: PLMEAA; ISSN: 0032-0943

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The iridoid glycoside teucardoside (I) and the flavonoids salvigenin and cirsiliol were isolated from T. polium var. pilosum and T. polium var.

alba. I showed neg. cancerostatic activity in P 388 leukemia system.

IT 34334-69-5

> RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of Teucrium polium)

RN 34334-69-5 HCAPLUS

4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-CN (CA INDEX NAME)

L61 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:61607 HCAPLUS

DOCUMENT NUMBER: 104:61607

TITLE: Lipoxygenase inhibition and tumor promotor inhibition

by medicinal plant components

AUTHOR (S): Kato, Ryuichi; Nakadate, Akio; Yamamoto, Satoshi

CORPORATE SOURCE: Med. Sch., Keio Univ., Tokyo, Japan

SOURCE: Wakan Iyaku Gakkaishi (1985), 2(1), 162-3

CODEN: WIGAES; ISSN: 0289-730X

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

Several oriental drug components, including flavonoids, chalcones, caffeic acid derivs., and related compds. were tested for their effects on mouse epidermal lipoxygenase (LO) [9029-60-1] activity and on the induction of epidermal ornithine decarboxylase (ODC) [9024-60-6] by the tumor promotor 12-o-tetradecanoylphorbol-13-acetate (TPA) [16561-29-8] and on TPA promotion of DMBA-initiated skin tumor. Topical application of quercetin [117-39-5], morin [480-16-0], fisetin [528-48-3], kaempferol [520-18-3], baicalein [491-67-8], cirsiliol [**34334-69-5**], 3,4,2',4'-tetrahydroxychalcone [21849-70-7], 3,4,2'-trihydroxychalcone [6272-43-1], and 3,4,4'-trihydroxychalcone [92496-89-4] markedly inhibited epidermal LO and TPA-induced epidermal ODC activities and promotion of DMBA tumorigenesis by TPA. 3,4-Dihydroxychalcone [72704-76-8] and esculetin [305-01-1] also had similar, but to a lesser degree, inhibitory effects. In contrast, no such inhibitory effects on the epidermal LO activity, TPA-induced epidermal ODC activity, and TPA promotion of skin tumor were observed after topical application of (+)-catechin [154-23-4], (-)-epicatechin [490-46-0], chalcone [94-41-7], caffeic acid [331-39-5], ferulic acid [1135-24-6], and chlorogenic acid [327-97-9].

TΤ 34334-69-5

RL: BIOL (Biological study)

(lipoxygenase and tumor promotion inhibition by)

RN 34334-69-5 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(9CI) (CA INDEX NAME)

L61 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1986:14552 HCAPLUS

DOCUMENT NUMBER:

104:14552

TITLE:

Antiviral activity of natural occurring

flavonoids in vitro

AUTHOR (S):

Tsuchiya, Yoshinori; Shimizu, Mineo; Hiyama, Yoshiyuki; Itoh, Kiyoshi; Hashimoto, Yoshinobu;

Nakayama, Mitsuru; Horie, Tokunaru; Morita, Naokata

CORPORATE SOURCE:

Kyoto Res. Inst., Kaken Pharm. Co., Ltd., Kyoto, 607,

Japan

SOURCE:

AR

Chemical & Pharmaceutical Bulletin (1985),

33(9), 3881-6

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE:

Journal English

LANGUAGE:

The antiviral activity of a wide range of naturally occurring flavonoids was investigated in vitro. Chrysosplenol B [603-56-5] and chrysosplenol C [23370-16-3], which are contained specifically in Chrysosplenium plants, and axillarin [5188-73-8] showed potent antiviral activity, especially rhinovirus. A comparison of the activities of the compds. tested indicated that 3-methoxyl and 5-hydroxyl groups in the flavone skeleton were both necessary for antiviral activity against rhinovirus, and the activity may also be affected by various groups at other positions. The other flavonoids tested had little or no antiviral activity against herpes simplex virus, influenza

virus and rhinovirus. Apparently, Chrysosplenium plants, which contain large amts. of chrysosplenol B and chrysosplenol C, may be useful as medicinal herbs against the common cold caused by rhinovirus infection.

IT 973-67-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiviral activity of)

RN 973-67-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-phenyl- (9CI) (CA INDEX NAME)

L61 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1978:526100 HCAPLUS

DOCUMENT NUMBER:

89:126100

TITLE:

New furanoid ent-clerodanes from Baccharis tricuneata

AUTHOR (S):

Wagner, Hildebert; Seitz, Renate; Lotter, Hermann;

Herz, Werner

CORPORATE SOURCE:

Inst. Pharm. Arzneimittellehre, Univ. Muenchen,

Munich, Fed. Rep. Ger.

SOURCE:

Journal of Organic Chemistry (1978), 43(17),

3339-45

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Ι

GI

Me O III

AB Because of the antitumor and antiviral properties of a crude extract, the constituents of the Columbian medicinal plant Baccharis tricuneata var tricuneata were investigated. The hexane extract yielded 4 new ent-clerodanes, bacchotricuneatins A-D, whose structures were elucidated, primarily by 1H4 and 13C NMR spectrometry. Proof for the structure and stereochem. of A (I) and B (II) was obtained by x-ray anal. Isolated from the ether extract were cirsimaritin, cirsiliol, and scopoletin.

IT 34334-69-5

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of Baccharis tricuneata)

RN 34334-69-5 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-(9CI) (CA INDEX NAME)

L61 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1973:11468 HCAPLUS

DOCUMENT NUMBER:

78:11468

TITLE:

Synthesis and **antiviral** activity of 4'-hydroxy-5,6,7,8-tetramethoxyflavone

AUTHOR(S):

Burnham, Weldon S.; Sidwell, Robert W.; Tolman,

Richard L.; Stout, Mason G.

CORPORATE SOURCE:

ICN Nucleic Acid Res. Inst., Irvine, CA, USA

SOURCE:

Journal of Medicinal Chemistry (1972),

15(10), 1075-6

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: LANGUAGE: Journal English

4'-Hydroxy-5,6,7,8-tetramethoxyflavone (I) [36950-98-8] showed pronounced activity in cell culture (nasopharynx carcinoma cells) against rhinovirus type 13, some activity against type 56, but little activity against type 1A. I inhibited the type 13 virus-induced cytopathogenic effect and decreased the quantity of infectious virus recoverable from cells by up to 105-fold. To synthesize I, tangeretin (4',5,6,7,8-pentamethoxyflavone) was degraded in refluxing KOH-EtOH to 2'-hydroxy-3',4',5',6'-tetramethoxyacetophenone, which was converted with p-benzyloxybenzaldehyde in KOH-EtOH to 4-benzyloxy-2'-hydroxy-3',4',5',6'-tetramethoxychalcone; cyclization with SeO2 and removal of the benzyl group by hydrogenation yielded I.

IT 3162-28-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 3162-28-5 HCAPLUS

CN Ethanone, 1-(2-hydroxy-3,4,5,6-tetramethoxyphenyl)- (9CI) (CA INDEX NAME)

L61 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:488224 HCAPLUS

DOCUMENT NUMBER: 77:88224

TITLE: Synthesis of eupatoretin and eupatin

AUTHOR(S): Ch'en, Fa-Ch'ing

CORPORATE SOURCE: Dep. Chem., Natl. Taiwan Univ., Taipei, Taiwan

SOURCE: Taiwan Kexue (1971), 25(3-4), 106

CODEN: TKHSAU; ISSN: 0015-7791

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

GI For diagram(s), see printed CA Issue.

AB The title compds. (I, R = Me and H, resp.), the anticancer

constituents of Eupatorium semiserratum, were prepared

IT 22248-14-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 22248-14-2 HCAPLUS

CN Ethanone, 1-(6-hydroxy-2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)